

REMARKS

Applicants have amended Claims 6 and 10 and have added new Claims 12-14. Support for the present amendment can be found generally throughout the Specification, specifically at page 5, line 4 - page 6, line 14. Applicants respectfully submit no new matter has been added by the present amendment.

I. Claims Rejections - 35 U.S.C. § 112

The Office Action rejects Claims 6-11 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicants have amended Claims 6 and 10 to state "one or more rubbers" as mentioned in the Office Action. Accordingly, Applicants request withdrawal of this ground of rejection.

II. Rejection under 35 U.S.C. § 102(b)/103(a)

Claims 6-10 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Scholl, et al. (U.S. Patent Nos. 6,252,008 and 6,319,994). U.S. Patent No. 6,319,994 is a divisional patent of U.S. Patent No. 6,252,008, accordingly as the Specifications are identical. Applicants have herein argued the references simultaneously as Scholl, et al. Applicants respectfully traverse this ground of rejection.

Applicants submit that in order to anticipate an invention under 35 U.S.C. § 102(b) the cited prior art reference **must teach each and every element of the claimed invention**, either expressly or inherently. Applicants also respectfully submit that "in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art references **must teach or suggest all the claims limitations**. The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the

prior art, and not based on Applicants' disclosure." See MPEP § 2142, citing In re Vaeck, 947 F.2d 488, 20 USPQ 2d. 1438 (Fed. Cir. 1991).

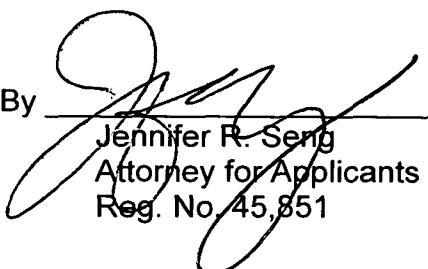
Applicants respectfully submit that Scholl, et al. fails to teach or suggest all the limitations of the present claims. In fact, as admitted by the Office Action beginning at page 3, third paragraph, Scholl, et al. does not teach the spacing parameter of secondary hydroxyl groups as being located no further than 4 carbon atoms away from the respective side chain end. According to the Office Action, such concept would be inherent. Applicants traverse that assertion.

As demonstrated in the Examples of the present invention, specifically Example 3, the properties of rubber mixtures having the specific content and arrangement of hydroxyl groups were improved with respect to, for example, rebound resilience and skid resistance when wet. See Table 3, the difference between the rebound resiliences at 23°C and 70°C. Comparative Example 3 illustrates that when hydroxyl groups having secondary hydroxyl groups are located no further than 4 carbon atoms away from the respective side chain end results in rubber vulcanizates having improved physical properties.

Despite the Office Actions assertion to the contrary, the Scholl, et al. does not use a method essentially identical to that of the present invention. Scholl, et al. discloses that the hydroxyl groups are introduced by the addition of hydroxy-mercaptans of the general formula described in column 3, lines 22-45. These formula do not have secondary hydroxyl groups and are not limited to hydroxyl mercaptans having secondary hydroxyl groups located no further than 4 carbon atoms away from the respective side chain end. Also, as noted in Example 3 of the present invention, using mercaptoethanol (see Table 1 Comparative Example 1), which does not have a secondary hydroxyl groups and which is disclosed in Scholl, et al., does not improve the physical properties of the rubber mixtures. See Table 2, Comparative Examples 3B and C, and Inventive Example 3.1.

Further, Applicants submit there is no motivation or suggestion in Scholl, et al. to modify the hydroxymercaptans disclosed there in to have a secondary hydroxyl group as arranged in the present invention. Therefore, for at least these reasons, Applicants respectfully request withdrawal of this ground of rejection.

Respectfully submitted,

By 
Jennifer R. Seng
Attorney for Applicants
Reg. No. 45,851

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3879
FACSIMILE PHONE NUMBER:
(412) 777-3902

/jme/JRS/JS0161